

(B) Remarks

Original claims 1, 14, and 15 are amended to improve the clarity of the recitations and thereby better distinguish applicants invention over the cited prior art, also, new claims 16–19, based on original claims dependent 8 and 9 addressed to the feature of a screen holder assembly for securing the silk screen frame to a decorating machine and at the same time establishing electrical contact between buss bars and the terminal end portions of the metal silk screen. Applicant is submitting a check in the amount of \$43.00 for payment of under 37 CFR 1.16(c) for 1 independent claim in excess of three.

The rejection of applicants' original claims as anticipated by the Miller patent no. 4,520,727 is respectfully traversed as unsound. The Abstract, Column 2, lines 1-33, and lines 52-59 of Miller are identified for a disclosure of “,said upstanding elongated sidewalls having sufficient resiliency to restore said stencil screen to said stencil screen support plane when displaced there from by a squeegee while traversing said desired pattern to be imprinted . . . and screen support arms (17, 18) secured to said rectangular stencil screen frame to extend outwardly from said end walls.” No such disclosure can be found in the identified parts of Miller's teachings. The concept of resiliency in the Miller patent comprises forming a V-notch in the screen which is filled with an elastomeric material to provide resiliency to the screen when displaced by the squeegee. Unlike applicants' invention, the frame of the Miller reference plays no role in the resiliency of the screen. Applicants' claims now recite in the relevant portions:

In claim 1,
“said side plate sections having sufficient resiliency to inwardly elastically bend toward each other to thereby relieve said stencil screen of a significant part of the stress while a squeegee traverses said desired pattern to be imprinted and to restore said stencil screen to said stencil screen support plane as a squeegee

traverses said desired pattern to be imprinted”

In claim 14,

“said screen support arms having sufficient resiliency to downwardly elastically bend to thereby relieve said stencil screen of a significant part of the stress while a squeegee traverses said desired pattern to be imprinted and to restore said stencil screen to said stencil screen support plane as a squeegee traverses said desired pattern to be imprinted.”

In claim 15,

“at least one of said upstanding elongated sidewalls and said screen support arms having sufficient resiliency to elastically bend to thereby relieve said stencil screen of a significant part of the stress while a squeegee traverses said desired pattern to be imprinted and to restore said stencil screen to said stencil screen support plane as a squeegee traverses said desired pattern to be imprinted.”

The resiliency of the screen frame to flex with respect to the longitudinal sides inwardly and the support arms downwardly is used to obtain a much prolonged screen life since elastic excursions of the screen are minimized if not eliminated, see the objects set forth in applicants’ specification beginning at page 5, line 4. Attention is also respectfully directed to applicants’ specification at page 13, line 5, where the importance of the elastic flexing of the screen frame is discussed as follows:

“As best shown by comparing Figures 4 and 8, the displacement of the screen, exaggerated for illustrative purposes only, by the vertical movement of the squeeze is sufficient to displace the screen into contact with the surface of an underlying workpiece and concurrently produce an elastic displacement of the plate section 22 forming the elongated sidewalls 18 and 20 toward each other. This inward elastic bending of the side walls relieves the stencil screen of a significant part of the stress usually isolated prior art forms of screen frames made of cast iron or cast aluminum. The width of foot sections 24 of the screen frame can be reduced by, for example, 10% or more to enhance to elastic properties structural shape of the screen frame. Thus, according to the present invention the sidewalls take on the function of storing energy for the subsequent function of applying a restoring force to return the screen to the stencil screen support plane 42. Figures 9, 10 and 11 further illustrate the displacement of the screen, exaggerated for illustrative purposes only, by the vertical movement of the squeeze 49. The present invention also provides that the screen support arms 36

and 38 are also elastic flexed in a similar manner as the elastic flexing of the plate section 22 as the screen is displaced into contact with the surface of an underlying workpiece,. The elastic flexing of the screen support arms 36 and 38 produces downward elastic bending of these arms as illustrated in exaggerated form in Figures 10 and 11 which also serves to relieve the stencil screen of a significant part of the stresses occurring during the decorating of a workpiece. Furthermore, the screen frame functions to absorb mechanical shock due to resilient nature of the screen frame design, particularly in the unlikely event when a workpiece breaks loose from the drive and support structure of the decorating machine.” (emphasis added)

The screen frame construction as discussed and claimed is not disclosed nor suggested by the cited prior art and it is respectfully submitted that claims 1-15 should be found in condition for allowance. The dependent claims 2-13 are submitted to further define the believed patentable combination of parent claim 1.

Newly submitted claims 16-19 call for a believed patentable combination of screen frame and screen solder assemblies for interconnecting the support arms of the frame with control arms of a decorating machine. More particularly, attention is respectfully to claim 16 and the following:

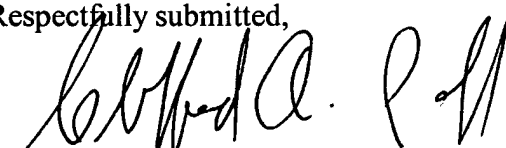
“a screen holder assembly for each of said screen support arms to interconnect said rectangular stencil screen frame with spaced apart control arms of a decorating machine, said screen holder assembly for each of said screen support arms supporting an electrically conductive terminal electrically connected to an elongated electrical bus bar fastened to said screen holder assembly, said elongated electrical bus bar arranged to traverse said electrically conductive terminal end portions in a generally parallel relation with said end walls for establishing electrical contact there between when said silk screen support arms releasable mount said rectangular silk screen frame to said spaced apart control arms of a decorating machine; and

fasteners to make electrically conductive contact by compressing said electrically conductive terminal end portions between said elongated electrical bus bars and said screen support arms while rigidly securing each said screen holder assembly to said screen support arms.”

This combination is believed patentably distinguished from the cited prior art. The prior art most notably used clamps to clamp the ends of the screen so that screen can be held under sufficient tension to the frame by screws and nuts, see for example Miller '727 patent, column 2, lines 60-69.

In view of the foregoing, it is believed the application is now in condition for allowance and such action is earnestly solicited. If the Examiner believes a telephone interview will further the prosecution of this application, he is invited to telephone the undersigned.

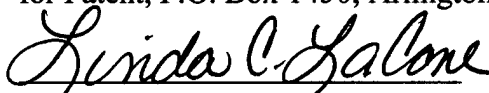
Respectfully submitted,



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I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Mail stop fee amendment, Commissioner for Patent, P.O. Box 1450, Arlington, VA 22313-1450 on June 21, 2004

 Date June 21, 2004
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